

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 18527 4/10/2001]

[Docket No. 2001-NM-43-AD; Amendment 39-12173; AD 2001-07-08]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model MD-11 Series Airplanes Equipped With Pratt & Whitney Model PW4400 Series Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to all McDonnell Douglas Model MD-11 series airplanes equipped with Pratt & Whitney Model PW4400 series engines. This action requires revising the Airplane Flight Manual (AFM) to advise the flight crew of applicable operational limits. This action is necessary to ensure that the flight crew is informed of applicable limitations in airplane performance, and to prevent reduced acceleration and climb performance relative to performance data in the AFM, which could result in the airplane overrunning the end of the runway during takeoff or landing, or impacting obstacles or terrain. This action is intended to address the identified unsafe condition.

DATES: Effective April 25, 2001.

Comments for inclusion in the Rules Docket must be received on or before June 11, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-43-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-43-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

Information pertaining to this amendment may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

FOR FURTHER INFORMATION CONTACT: Philip C. Kush, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5263; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: The FAA has found that the Operational Limits specified in the Limitations Section of the Airplane Flight Manual (AFM) for McDonnell Douglas Model MD-11 series airplanes equipped with Pratt & Whitney Model PW4400 series engines do not adequately list the performance correction sections in the AFM. Section 4B, the applicable performance correction section for Model MD-11 series airplanes with Pratt & Whitney Model PW4462 engines, is not listed.

Model PW4462 engines are rated for higher thrust than other Model PW4400 series engines. Omitting the reference to Section 4B in the required performance correction paragraph of the Operational Limits subsection in the Limitations Section of the AFM could cause the flight crew to be incorrectly informed about limitations in airplane performance.

Also, the FAA has received reports that Pratt & Whitney Model PW4400 series engines with certain early-production fan blades (Phase 0/1, FB2B), as installed on certain McDonnell Douglas Model MD-11 series airplanes, do not produce the amount of thrust indicated in the AFM. This thrust shortfall is due to erosion of the fan blade's leading edge. This condition causes a thrust shortfall of 2.5 percent at high-thrust settings. The flight crew has no indication of this shortfall in thrust. This condition could result in reduced acceleration and climb performance relative to performance data in the AFM, which, if not corrected, could lead to the airplane overrunning the end of the runway during takeoff or landing, or impacting obstacles or terrain.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to ensure that the flight crew is informed of applicable limitations in airplane performance, and to prevent reduced acceleration and climb performance relative to performance data in the AFM, which could result in the airplane overrunning the end of the runway during takeoff or landing, or impacting obstacles or terrain. This AD requires revising the Limitations Section of the AFM, and, for certain airplanes, Section 4A or 4B of the Performance Section of the AFM, to advise the flight crew of applicable operational limits.

Interim Action

This is considered to be interim action until final action is identified, at which time the FAA may consider further rulemaking.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- ? Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- ? For each issue, state what specific change to the AD is being requested.
- ? Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-43-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a “significant regulatory action” under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption “ADDRESSES.”

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new air worthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-07-08 MCDONNELL DOUGLAS: Amendment 39-12173. Docket 2001-NM-43-AD.

Applicability: All Model MD-11 series airplanes equipped with Pratt & Whitney Model PW4400 series engines, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To ensure that the flight crew is informed of limitations in airplane performance, and to prevent reduced acceleration and climb performance relative to performance data in the Airplane Flight Manual (AFM), which could result in the airplane overrunning the end of the runway during takeoff or landing, or impacting obstacles or terrain, accomplish the following:

AFM Revision: Limitations Section

(a) Within 30 days after the effective date of this AD, revise Section 1, Limitations, of the FAA-approved AFM to include the following information under Subsection 3, Operational Limits. This may be accomplished by inserting a copy of this AD into the AFM.

“Required Performance Corrections in Section 4A or 4B must be applied as applicable.”

AFM Revision: Performance Section 4A or 4B

(b) For airplanes with Pratt & Whitney Model PW4460 or PW4462 engines with FB2C fans installed: Within 30 days after the effective date of this AD, revise the Performance Section of the FAA-approved AFM to include the following information under Section 4A or 4B, as applicable. This may be accomplished by inserting a copy of this AD into the AFM.

“When operating with one PW4460 engine, one PW4462 engine (operated at PW4460 thrust rating), or one PW4462 engine installed, apply the following performance corrections:

Weight must be reduced by:

- Takeoff 1.3%
- Enroute 2.5%
- Landing 1.3%

When operating with more than one PW4460 engine and/or PW4462 engine (operated at PW4460 thrust rating), or more than one PW4462 engine installed, apply the following performance corrections:

Weight must be reduced by:

- Takeoff 2.5%
- Enroute 2.5%
- Landing 2.5%.”

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Operations Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(e) This amendment becomes effective on April 25, 2001.

FOR FURTHER INFORMATION CONTACT: Philip C. Kush, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5263; fax (562) 627-5210.

Issued in Renton, Washington, on April 3, 2001.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.